

ENTREPRENEURSHIP AND INNOVATION IN TENNESSEE 2012



CREATE.
INVEST.
GROW.

"We are deeply committed to supporting the innovators, entrepreneurs and investors that call Tennessee home."

-TN Governor Bill Haslam



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APRIL 2013
DEAR FRIENDS & PARTNERS,

As you can see from the articles popping up in *Forbes*, *The New York Times*, and *Inc. Magazine*, Tennessee is quickly becoming one of the best places in the country for entrepreneurs to launch and grow an early-stage company. Building on a deep store of entrepreneurial DNA that includes Tennesseans like Fred Smith (FedEx) and Tommy Frist (HCA), startup companies are springing up across the state in sectors ranging from medical devices and healthcare technology to digital media and consumer internet.

This momentum is measurable. As you'll see in this report, startup companies, along with other early-stage, high-growth companies in the state raised over \$210 million of venture capital in the past year. In 2012, over \$17 million of this funding was raised by a subset of the 126 companies who completed training and mentorship programs at one of the state's nine regional business accelerators. In addition, the number of startup companies based on technologies from research institutions in the state has tripled over the past two years. The word is spreading — Tennessee was the #1 state in the country for the number of events held during Global Entrepreneurship Week, an international weeklong celebration of entrepreneurship.

This momentum is built on the talent and determination of our state's entrepreneurs as well as a growing support structure that is helping increase those entrepreneurs' chance of success. For example, business accelerator programs like Company Lab in Chattanooga, the Entrepreneur Center in Nashville and Zero510 in Memphis are connecting entrepreneurs with mentors and investors. The state's research institutions like the University of Tennessee, Vanderbilt University and the University of Memphis are investing additional resources in commercializing approximately \$3 billion of institutional research and development that occurs in the state each year.

To help support and coordinate all these efforts, the public and private sectors have come together to create Launch Tennessee, a partnership focused on making Tennessee the best place in the Southeast to start and grow an early-stage company. As the chair and vice-chair of this effort, we are deeply committed to supporting the innovators, entrepreneurs and investors that call Tennessee home.

We are excited for what has been accomplished in Tennessee in 2012 and are even more excited about what will be accomplished in the years ahead. We hope that you find this report useful and informative, and we hope each of you will personally get involved in the entrepreneurial ecosystem in Tennessee.

SINCERELY,

Bill F. Hagerty
BILL HAGERTY

Chairman, Launch Tennessee

Commissioner, Tennessee Department of Economic and Community Development



Stuart C. McWhorter
STUART MCWHORTER

Vice-Chairman, Launch Tennessee

Co-Founder and President, Clayton Associates



ENTREPRENEURSHIP IN TENNESSEE

TENNESSEE HAS A RICH HISTORY OF ENTREPRENEURSHIP, WITH SOME OF THE WORLD'S LARGEST COMPANIES FOUNDED AND BASED IN TENNESSEE.

For example, HCA (formerly Hospital Corporation of America) was founded in Nashville in 1968 by Dr. Thomas Frist Sr., Thomas Frist Jr. and Jack Massey. The company is now the largest healthcare company in the world and has either directly or indirectly helped spin off over 500 new healthcare companies across the state. Similarly, Federal Express, based in Memphis, was founded in 1971 by Vietnam War veteran Fred Smith and now grosses over \$40 billion in annual revenue and transports more than three million packages a day across the globe. Unum, the largest disability insurance company in the world, is based in Chattanooga. Founded in 1887 as Provident Life and Accident Insurance Company, the company initially provided accident insurance for “uninsurable” workers in the sawmills and coal mines around Chattanooga.

Today, Tennessee entrepreneurs continue to solve some of the world's biggest problems in areas ranging from healthcare to education to science and technology. Not only that, but Tennessee's entrepreneurs are one of the driving forces for job creation in the state. According to the Kauffman Foundation, approximately one in five new jobs in the state is the result of entrepreneurship.

HISTORY OF LAUNCHTN

Despite Tennessee's rich entrepreneurial history, it has not always been viewed nationally as a hotbed for entrepreneurship. In fact, many rankings of entrepreneurship and innovation-based economic development in the early to mid-2000s place Tennessee in the middle of the pack on measures such as innovation-based job creation and entrepreneurial culture.

However, over the past five to 10 years, a culture of entrepreneurship and innovation has organically started to develop across the state. In part driven by local initiatives such as Memphis Bioworks, the Entrepreneur Center in Nashville and Company Lab in Chattanooga, local communities are acknowledging entrepreneurship as a key driver of economic development and proactively building initiatives focused on attracting, supporting and retaining bright, energetic entrepreneurs in their cities.

To help catapult the momentum for entrepreneurship that was already developing at the local level, Tennessee Governor Bill Haslam made “investing in innovation” one of the four key components of his statewide economic development strategy. As part of this effort, a small team from the state's economic development department worked with entrepreneurs, venture capital investors, technology transfer officers and other key stakeholders from across the state in early 2012 to develop a comprehensive plan for making Tennessee the #1 state in the Southeast for entrepreneurs to launch and grow a company.

The result of this plan was the creation of Launch Tennessee (LaunchTN), a public-private partnership focused on coordinating and supporting all of the state's entrepreneurship-related activities. Formed from a legislatively created organization called the Tennessee Technology Development Corporation, LaunchTN is governed by a 22-member board of directors composed of some of the state's leading entrepreneurs, investors, innovators and community leaders. The organization has developed a five-year strategic plan focused on four goals: (1) boosting entrepreneurship; (2) increasing the commercialization of technologies from the state's research institutions; (3) increasing the amount of venture capital investment in the state and (4) elevating Tennessee's national profile as a hotbed of entrepreneurship and innovation.

LaunchTN operates a number of programs and activities including coordinating a network of nine business accelerators across the state that provide mentorship and support to entrepreneurs working to launch their businesses. LaunchTN also operates the \$30 million INCITE Co-Investment Fund, which provides matching capital to Tennessee-based companies receiving investment from private-sector investors, as well as a program to provide support to innovative small businesses applying for federal Small Business Innovation Research (SBIR) awards, which provide non-dilutive capital to early-stage companies. LaunchTN also coordinates a number of events that help connect entrepreneurs, innovators and investors from across the state and around the country.

2012 HIGHLIGHTS

Tennessee's entrepreneurship and innovation efforts experienced significant success in 2012. Under the guidance of LaunchTN, the state's nine regional business accelerators provided support to over 125 early-stage companies, which raised a total of over \$17 million in private capital and created over 180 jobs in 2012 alone. In total, over \$210 million in venture capital was invested in approximately 200 Tennessee-based companies in 2012. Companies receiving funding were in a range of industries including healthcare, technology and life sciences.

In 2012, Tennessee's research institutions invested over \$2.7 billion in research and development. While historically R&D has

not translated into significant startup opportunities, this has begun to change. For instance, the number of university startups spun out of the state's research institutions in 2012 increased by over 70% from the previous year and over 200% from two years earlier, with 24 startups based on intellectual property from the state's research institutions launched in 2012.

As a result of these and other activities, the culture of entrepreneurship continues to grow rapidly across the state. For example, in 2012 Tennessee hosted the most events of any state in the country during Global Entrepreneurship Week, an international celebration of entrepreneurship. To cover the growing entrepreneurial community in the state,

a number of new media outlets have popped up including Teknovation.biz (an innovation-based blog in East Tennessee), Southern Alpha (a new entrepreneurial news source based in Nashville that covers the entire Southeast), and Nibletz (an entrepreneurial news source that relocated to Memphis in Fall 2012 and covers startups from “everywhere else” outside the coasts).

If you are an entrepreneur, investor or innovator, there has never been a better time to live in Tennessee, which is rapidly becoming one of the best places in the country to launch and grow a company.

\$3 BILLION IN FEDERAL RESEARCH AND DEVELOPMENT
150+ HIGH-POTENTIAL STARTUPS LAUNCHED
\$210+ MILLION IN VENTURE CAPITAL RAISED
#1 FOR GLOBAL ENTREPRENEURSHIP WEEK

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*The data represented on the cover was compiled from the following sources:

1. TN Based Research Institutions
2. Tennessee Regional Accelerators
3. LaunchTN, Price Waterhouse Cooper, Nashville Capital Network. Represents VC Investments up to \$15 million in size.
4. Kauffman Foundation

HIGH-GROWTH SECTORS

SOFTWARE AND CONSUMER INTERNET

Tennessee has three accelerator programs that have assisted software and consumer internet companies:

GIGTANK (Chattanooga)
JUMPSTART FOUNDRY (Nashville)
SEED HATCHERY (Memphis)

Chattanooga, also known as “Gig City,” is home to the **COUNTRY’S FASTEST INTERNET.**

Tennessee has one of the Southeast’s hottest emerging software and consumer internet scenes. For instance, in April 2012, Google led its first Google for Entrepreneurs event in Nashville in partnership with FLO {thinkery}; The Entrepreneur Center; The Tennessee Film, Entertainment and Music Commission; and the Nashville Area Chamber of Commerce. This was the only Google for Entrepreneurs event held in 2012 and will be replicated in 2013. In conjunction with this event, HackNashville was hosted in the days following the Google for Entrepreneurs event and included several representatives from Google.

In September 2012, the city of Chattanooga held Hackanooga, a hackfest sponsored by Mozilla in partnership with US Ignite, an organization whose mission is to help create next-generation Internet applications in six key areas: education, energy, health, public safety, transportation and advanced manufacturing. The event served as a forum for web developers, coders and other tech-savvy entrepreneurs to develop and test applications on an open web platform while taking advantage of Chattanooga’s high bandwidth internet. All work products from this event were eligible to apply for nearly \$500,000 in awards from the Mozilla Ignite apps challenge.

In October 2012, the University of Tennessee Business Analytics Conference was held in Knoxville, TN and brought together multiple stakeholders from the digital analytics space.

From an infrastructure perspective, Chattanooga is home to the world’s fastest internet, with one-gigabit-per-second fiber internet service available throughout the region. In order to leverage “the Gig,” Chattanooga has developed a business accelerator program called GigTank specifically to help launch and support companies developing high bandwidth applications. The city of Memphis runs an accelerator program that focuses specifically on technology, including software and consumer internet. This program, called Seed Hatchery, is partnered with venture capital firm Solidus and graduated four companies in the software and consumer internet space in 2012.

GIGMARK

Key Investor(s): Self-funded
Capital Raised: ~\$1 million
HQ: Knoxville, TN
Website: www.gigmark.com

Gigmark Interactive Media has a patented process that delivers a robust app experience, which is never out of date, all the while collecting the most robust analytics in the industry. Our primary product, the Interactive Flash Drive (IFD), is being used by companies like GM, The Marines and Philips Lighting, just to name a few. Once our clients give their customers, clients or potential clients an IFD, they can keep them updated and track their movements. The company is owned by Parker Frost, Mark Myers and Rob Balchunas.

BANYAN

Key Investor(s): Chattanooga Renaissance Fund, various CA and TN-based angel investors
Capital Raised: \$450,000
HQ: Chattanooga, TN
Website: <https://getbanyan.co>

Banyan is a 2012 graduate of GigTank, Chattanooga’s technology-focused accelerator program. Banyan makes it easy for researchers to share, publish and collaborate on research. The company was the GigTank grand prize winner, receiving a \$100,000 prize from AlcatelLucent. Banyan recently relocated its headquarters to Chattanooga from Tampa Bay, FL.

QUICKCUE

Key Investor(s): Chattanooga angels, Blank Slate Ventures, Chattanooga Renaissance Fund
Capital Raised: \$3,300,000
HQ: Chattanooga, TN
Website: www.quickcue.com

Quickcue was founded during CoLab’s 48-hour launch event in 2011. Quickcue helps restaurant hosts, servers and managers improve operations, get to know their guests and improve the guest experience. Quickcue manages the waitlist, reservations, mobile guest paging and full table management all from an iPad at the host stand. Quickcue recently secured a key customer: Craftworks Restaurant and Breweries, the country’s leading operator of more than 180 craft beer-focused restaurants.

DIGITAL MEDIA & ENTERTAINMENT

From rock n’ roll and the blues in Memphis, to country music and rock in Nashville, to bluegrass in the hills of the Smoky Mountains, Tennessee has an incredibly rich musical heritage. This history has helped Tennessee build a strong music industry that has resulted in record labels like Universal, Sony Music and Warner Music as well as publishing powerhouses SESAC and BMI having a strong presence in the state. Tennessee also plays host to major music festivals like Bonnaroo and CMA Music Fest, which together annually attract over 150,000 visitors to the state and contribute an estimated \$24 million to the local economy.

Emerging from this strong musical history is a growing number of digital media and entertainment high-growth companies. For instance, homegrown video production platform StudioNow was founded in Tennessee before being sold to AOL for nearly \$40 million. In January 2013, StudioNow announced that it would become a stand-alone entity based in Nashville and would expand its operations after receiving a cash injection from Tennessee-based investment firm Claritas Capital.

Other key examples of VC-funded digital media companies in Tennessee including OverDog, a company that connects fans with athletes via video games. Tennessee’s accelerator programs also actively cultivate digital media and entertainment companies.

Tennessee also has a dense support network of engaged mentors which can provide assistance to early-stage digital media and entertainment companies. These mentors, many of which are former industry executives, can be found in accelerator programs such as Jumpstart Foundry at the Entrepreneur Center in Middle Tennessee.

*Sources:

1. Company Information from Senior Management of Individual Companies
2. Music City Music Council
3. Tennessee Regional Accelerators

37 digital media and entertainment startups have graduated from Tennessee’s business accelerators in the **PAST TWO YEARS.**

AMERICAN HOMETOWN MEDIA

Key Investor(s): Limestone Fund, Tennessee Angel Fund, Tennessee Community Ventures, Solidus
Capital Raised: \$4 million +
HQ: Franklin, TN
Website: www.americanhometownmedia.com

American Hometown Media (AHM) leverages an internet platform to feature everyday American home cooks as celebrity chefs. The company syndicates editorial content from its database of user-posted recipes (the largest on the internet) to community newspapers, magazines and other forms of media nationwide. It has some of the deepest user engagement metrics on the internet and is the largest social-food site not owned by a major media conglomerate. AHM is run by Dan Hammond, who co-founded several media companies including Publishing Group of America and American Hometown Publishing.

MERCURY INTERMEDIA

Key Investor(s): Burch Investment Group
Capital Raised: \$4 million
HQ: Brentwood, TN
Website: <http://mercury.io>

Mercury Intermedia builds strategic, mission-critical mobile applications and platforms for major commercial media, enterprise and higher education institutions. Clients such as The New York Times, SAP, CNN, Fox News, Comcast, University of Mississippi and Showtime have relied on Mercury to create top-rated mobile user experiences for iOS, Android and Windows devices. Experts in both the art and science of mobile, Mercury’s engaging apps have been downloaded over 60 million times and consistently rank #1 and achieve 4+ star reviews in app stores. Powering these apps is Mercury’s content engine that serves over 40 billion stories each year. Based in Brentwood, Tennessee, the company was founded by three-time entrepreneur Bill Tallent.

HIGH-GROWTH SECTORS (CONTINUED)

HEALTHCARE SERVICES

\$5.5 BILLION in venture capital and private equity funding has been secured by healthcare startups and early-stage companies in Tennessee since 2000.

HCA has directly or indirectly spun off over **500** other healthcare companies.

15 publicly traded healthcare service companies are headquartered in TN.

CHANGE HEALTHCARE

Key Investor(s): BlueCross BlueShield Venture Partners, Mitsui & Co., Sandbox Industries, Solidus, West Health Investment Fund
Capital Raised: \$17 million +
HQ: Brentwood, TN
Website: www.changehealthcare.com

Since 2007, Change Healthcare Corporation's mission has been to achieve sustainable engagement with personalized and actionable information that changes the way people purchase healthcare services. With an engagement rate of nearly 60%, Change Healthcare is the premier national provider of healthcare cost transparency tools to self-insured employers and health plans. The company's flagship product offering is called Transparency Messenger™, powered by sophisticated algorithms that import and analyze millions of healthcare claims. The Company also recently launched Healthcare University™, interactive content designed to educate consumers on the basic concepts of healthcare.

Tennessee is home to over 26,000 healthcare companies, employing approximately 400,000 Tennesseans and generating approximately \$70 billion in annual revenue. Hospital Corporation of America (HCA), the world's largest healthcare company, was founded in Nashville and now owns and operates over 160 hospitals and over 100 surgery centers in the United States and England.

NAVIHEALTH

Key Investor(s): Welsh, Carson, Anderson & Stowe
Capital Raised: \$75 million (est.)
HQ: Brentwood, TN
Website: <http://navihealth.us>

NaviHealth is a provider of post-acute care medical services, offering streamlined healthcare to patients after hospital or medical facility discharge by coordinating the efforts of multiple stakeholders including health plans, hospitals, doctors and Medicare beneficiaries. NaviHealth has received significant investment from one of the country's leading private equity investment firms, NY-based Welsh, Carson, Anderson & Stowe. The Company is chaired by Welsh, Carson's Tom Scully, a former Bush Administration official and head of the Centers for Medicare and Medicaid Services.

There are several well-funded investment firms in Tennessee which target investments in the healthcare sector including Heritage Healthcare Innovation, a \$167 million venture capital firm that has many major hospital chains as limited partners, and MedCare Investment Funds, which has approximately \$375 million in assets under management.

Several healthcare-focused investment firms outside Tennessee have also made significant investments or are actively seeking investments in Tennessee. For instance, the country's largest healthcare-focused venture capital firm, NEA, with \$13 billion in capital, has made several investments in Tennessee, including Brentwood-based American Pathology Partners and Nashville-based DSI Renal.

Tennessee has many support programs for early-stage healthcare companies, including the Entrepreneur Center, a business accelerator program located in Nashville, and the Nashville Healthcare Council, an organization which in part serves as a mechanism for entrepreneurs to connect with many of the city's larger healthcare services companies.

*Sources:
1. Nashville Healthcare Council
2. Company Information from Senior Management of Individual Companies
3. Life Science Tennessee
4. Nashville Capital Network Annual Report

MEDICAL DEVICE AND LIFE SCIENCES

Tennessee's life science industry has over 700 businesses that collectively employ over 26,000 Tennesseans. Established medical device companies such as Smith & Nephew and Medtronic have significant divisions in Memphis, and Wright Medical's global headquarters is located just outside Memphis.

Some of the world's largest pharmaceutical giants, including Pfizer and GlaxoSmithKline, have core divisions in the state. In addition, several of Tennessee's research institutions, including Vanderbilt University and St. Jude Children's Research Hospital, have secured agreements with large biopharmaceutical companies, including Vanderbilt's 2012 agreement with Bristol-Myers Squibb to develop new treatments for Parkinson's disease.

The state also contains many earlier-stage life science companies with high-growth potential, including ABT Molecular (PET scan biomarkers) and Numeta Sciences (nutraceutical products) in East Tennessee; Molecular Sensing (drug discovery technologies) and Insight Genetics (molecular diagnostics) in Middle Tennessee; and Christie Medical Holdings (vein viewing tools) and GTx (drug compounds for cancer treatment) in West Tennessee. These companies have the potential to transform the life sciences industry over the coming years. Also, Memphis's ZeroTo510 business accelerator is the first cohort-based medical device accelerator in the country and recently graduated its first cohort, with five of the six participants receiving follow-on capital investments.

Memphis is the **2ND-LARGEST** center for orthopedic devices in the U.S.

15+ life sciences & medical device companies have been funded in Tennessee since 2010.

Tennessee's medical device industry is the **7TH-LARGEST** in the country.

\$1.1 BILLION has been privately invested in the life sciences sector in Tennessee since 2004.

RESTORE MEDICAL SOLUTIONS

Key Investor(s): Innova, MB Ventures
Capital Raised: \$2.5 million
HQ: Memphis, TN
Website: <http://restoremedicalsolutions.com>

Restore Medical Solutions participated in the first cohort of Memphis's ZeroTo510 accelerator program, the country's only cohort-based medical device accelerator. The company has designed a proprietary product for sterilizing surgical instruments and increasing the efficiency of surgical instrument reprocessing times. The company has received purchase commitments from five hospitals and in late 2012 received \$2.5 million in Series A financing.

ADVANCED CATHETER THERAPIES

Key Investor(s): Chattanooga Renaissance Fund, others
Capital Raised: \$3 million +
HQ: Chattanooga, TN
Website: www.acatheter.com

Formerly known as Atlanta Catheter Therapies, the company changed its name to Advanced Catheter Therapies ("ACT") and moved to Chattanooga, TN after receiving a Series A equity financing through an investment consortium in Chattanooga. The Company is an early-stage research and development medical device company with a portfolio of innovative endovascular catheter technologies targeting vascular disease. ACT's lead device is the patented Occlusion Perfusion Catheter (OPC) a localized therapeutic agent delivery system.

ACCELERATING ENTREPRENEURSHIP

Although entrepreneurship is hard, an entrepreneur's chance of success can be meaningfully increased if entrepreneurs have access to good mentors who can help them refine their business model, connect with potential customers and suppliers, and gain access to investors. To help entrepreneurs with these activities, a number of business accelerator programs have been developed across the state. Business accelerators are intensive, boot-camp style training and mentoring programs that typically last between three and six months and provide support to entrepreneurs as they work to refine and develop their business ideas. Most accelerator programs conclude with a **"Demo Day"** where entrepreneurs have a chance to pitch to investors.

Through a competitive process in 2011, Tennessee's state government announced the funding of nine regional business accelerators dispersed geographically across the state. Each of these accelerators is eligible to receive **\$250,000** of funding per year for up to three years based on its performance. Five of these accelerators reside in urban areas and four are located in more rural areas.

Each of these accelerators has a different industry focus, which leverages the key assets of each region. For example, the ZeroTo510 medical device accelerator is located in

Memphis, home to world-renown medical device companies such as Wright Medical and Smith & Nephew as well as several venture capital firms that specialize in medical devices. Similarly, the Nashville accelerator targets healthcare and digital media, two of the city's strongest sectors, while the Chattanooga accelerator targets consumer internet and data analytics, largely in part because of Chattanooga's unique one-gigabit-per-second internet speed, among the fastest in the world.

Each of these accelerator programs provide entrepreneurs with mentors who not only have expertise in specific industries but also have expertise in specific functional areas such as accounting, finance, sales and strategy. Today, Tennessee's nine regional accelerators have a total of over **500** mentors that represent both a broad range of industries and functional expertise.

During 2012, these nine accelerators screened over **700** company ideas and graduated over **125** companies from their accelerator programs. In aggregate, these companies raised over **\$17 million** through presentations at Demo Days and other one-on-one investor conversations. These companies are providing economic benefit to the state, having created **185** full-time equivalent jobs in 2012 alone. As these companies continue to grow, they will produce increasing economic prosperity for the state.

There are also many other organizations in the state that provide support to entrepreneurs. For example, the Entrepreneurs' Organization, a professional support organization for entrepreneurs, has a major presence in Nashville, and the Lamppost Group in Chattanooga is a hybrid venture capital / business accelerator program that houses the startups in which it invests.

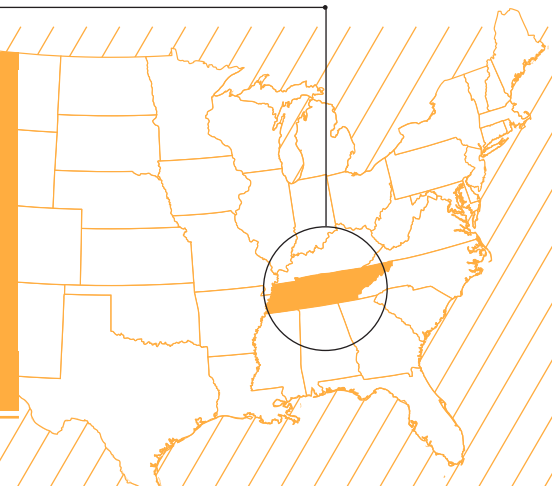
Tennessee's statewide accelerator network has helped make Tennessee one of the **BEST PLACES IN THE COUNTRY FOR ENTREPRENEURS TO LAUNCH A BUSINESS.**



Southern Middle TN Entrepreneur Center
-TenneSeed Camp Accelerator, Tullahoma, TN



CO.LAB
-Gig Tank Accelerator, Chattanooga, TN



NW TN ACCELERATOR Martin, TN

Target sectors:
AGRICULTURE

Companies Assisted:
20

UC SUCCESS NOW Crossville, TN

Target sectors:
VARIOUS

Companies Assisted:
25

ACCELNOW Johnson City, TN

Target sectors:
LIFE SCIENCES

Accelerated Companies: **4**

\$ raised by graduates:
100,000

ENTREPRENEUR CENTER Nashville, TN

Target sectors:
HEALTHCARE, DIGITAL
ENTERTAINMENT, CONSUMER
INTERNET & APPS

Accelerated Companies: **20**

\$ raised by graduates:
8,000,000

KNOXVILLE ENTREPRENEURSHIP CENTER Knoxville, TN

Target sectors:
INTELLECTUAL PROPERTY
COMMERCIALIZATION

Accelerated Companies: **4**

\$ raised by graduates: **100,000**

TENNESSEE REGIONAL ACCELERATOR NETWORK

ZEROTO510; SEED HATCHERY Memphis, TN

Target sectors:
MEDICAL DEVICES & DIAGNOSTICS,
CONSUMER INTERNET & APPS

Accelerated Companies: **12**

\$ raised by graduates:
3,600,000

SW TN ENTREPRENEUR DEVELOPMENT CENTER Jackson, TN

Target sectors:
VARIOUS

Companies Assisted:
20

SOUTHERN MIDDLE TN ENTREPRENEUR CENTER Tullahoma & Springfield, TN

Target sectors:
AUTOMOTIVE

Accelerated Companies: **8**

\$ raised by graduates:
715,000

COLAB Chattanooga, TN

Target sectors:
BIG DATA, SOFTWARE &
CONSUMER INTERNET

Accelerated Companies: **13**

\$ raised by graduates:
5,000,000

9 ACCELERATORS

700 COMPANIES
SCREENED

126 COMPANIES
ACCELERATED

\$17.5 MILLION
RAISED FOR
ACCELERATED
COMPANIES

185 JOBS CREATED

* Reported from Regional Accelerators

TURNING RESEARCH INTO REALITY

DID YOU KNOW?

EACH YEAR, APPROXIMATELY
\$3 BILLION IS INVESTED in research & development

BY TENNESSEE'S RESEARCH INSTITUTIONS

From the development of the atomic bomb in Oak Ridge to the discovery of new treatments to battle pediatric cancer at St. Jude Children's Research Hospital, Tennessee has a rich history of research and development. Periodically, these R&D efforts have resulted in the development of new technologies that have served as the basis for new companies. For example, technologies from Oak Ridge National Laboratory in East Tennessee provided the groundwork for PET and CT scans, which today are used in hospitals throughout the world. In the case of this particular technology, a company called Imtek was created by researchers at ORNL to advance a technology that was later acquired by PET and CT scan manufacturer CTI Molecular Imaging, which itself was acquired by Siemens in 2005 for **\$1 BILLION**.

Over time, however, the state's R&D efforts have not produced the number of new companies one might expect. For example, in 2010, there were only eight new companies launched based on technology from research institutions in the state. Recognizing this

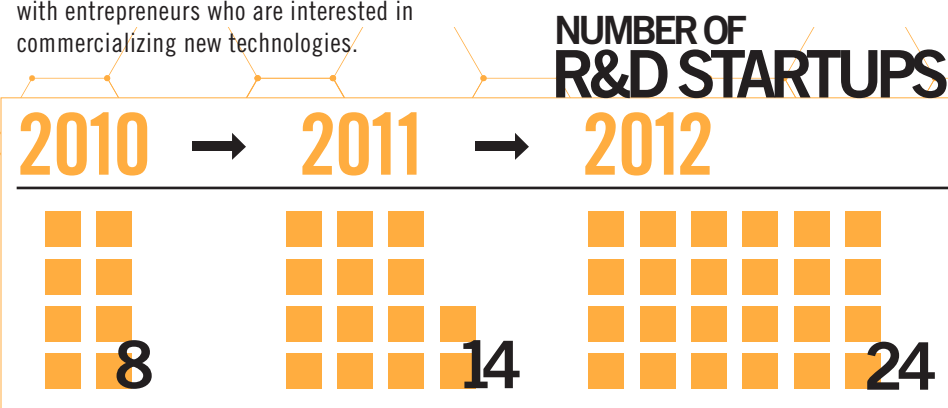
challenge, both the State of Tennessee and individual research institutions have made substantial investments to support the commercialization of new technologies. For example, for the past two years the State of Tennessee has provided maturation funding for technologies at research institutions across the state as well as run a program to help support early-stage companies in applying for federal Small Business Innovation Awards (SBIRs). In addition, the public-private partnership LaunchTN is setting up a series of entrepreneur-inventor meetups in 2013 to provide an opportunity to connect inventors and technologies with entrepreneurs who are interested in commercializing new technologies.

This state's investment in commercialization and technology transfer is already starting to pay off. For example, the number of startup companies based on technologies from research institutions increased to 24 in 2012 from 14 in 2011 and 8 in 2010.

Based on the investments currently being made in technology transfer and commercialization efforts, both entrepreneurs and investors should expect the numbers of research institution-based startups in the state to continue to grow in coming years.



Gov. Bill Haslam visits Oak Ridge National Laboratory



Many individual research institutions in the state are also investing in activities to help expand **technology transfer** and **commercialization**. For example:

OAK RIDGE NATIONAL LABORATORY

ORNL, one of the country's leading institutions for advanced materials and energy research, has coordinated various forums and meetups to "bridge the gap" of technology transfer. One of these events, SPARK!, is held annually as a forum for ORNL researchers to present research that is ready for commercialization to the region's most experienced entrepreneurs and investors. Another key forum, "Bridging the Gap," is held annually to highlight interesting technologies still under development at ORNL.

VANDERBILT UNIVERSITY

Vanderbilt has made big investments in technology transfer, more than doubling the size of its technology transfer staff, including hiring a former venture capital investor to focus 100% of his time on launching new companies based on Vanderbilt technologies. In addition, Vanderbilt's technology transfer and commercialization office is forming an External Advisory Committee composed of entrepreneurs and investors who can help inform the university's commercialization efforts.

UNIVERSITY OF TENNESSEE

The University of Tennessee Research Foundation (UTRF) awarded \$120,000 to eight teams of inventors in 2012, with each team receiving \$15,000 to further develop its technology. These maturation grants will enable inventors to get their products closer to licensing and commercialization.

TENNESSEE BOARD OF REGENTS (46 INSTITUTIONS)

2012 saw an increase in both patenting and licensing activities throughout the Board of Regents system, including the licensing of climbing robotic technology by Tennessee Tech to a Tennessee-based startup and the licensing of breakthrough educational software by Austin Peay to an international leader in electronic learning management.

ST. JUDE CHILDREN'S RESEARCH HOSPITAL

The St. Jude Office of Technology Licensing (OTL) plans to increase its staff in 2013 by adding a new marketing position. The OTL is also looking into the possibility of establishing a proof of concept/prototype development fund to help realize the commercial potential of some of its promising early-stage inventions.

UNIVERSITY OF MEMPHIS

During 2013, the University of Memphis will open the Crews Venture Labs (CVL), a world-class technology incubator. The CVL will offer flexible office space, furnished offices for visiting investors and mentors, lab areas for prototype development and advanced technological systems to researchers and entrepreneurs.

Y-12

Y-12, a leading institution in developing technologies for nuclear security, has recently introduced an Xpress Terms Licensing (XTL) agreement. This streamlined licensing agreement accelerates the time it takes for a startup to license technology developed at Y-12.

2011 VS. 2012

*Sources:
 1. Tennessee Based Research Institutions
 2. Various Tennessee Public News Sources

+12%

LICENSES & OPTIONS

+23%

PATENTS ISSUED

+56%

PATENT APPLICATIONS

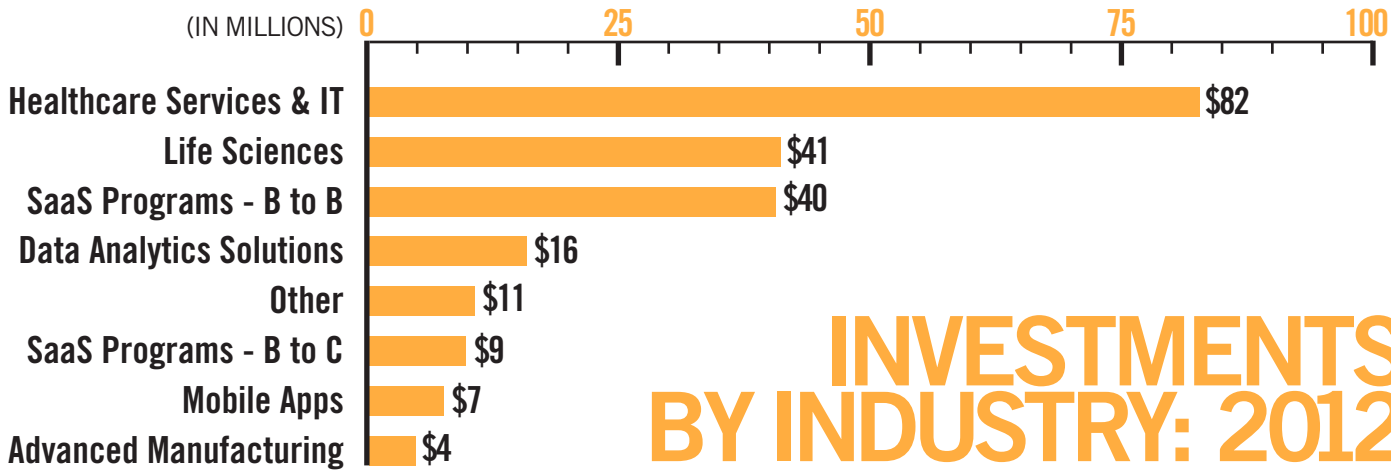
\$210+ MILLION IN VENTURE INVESTMENT

Over the past year, early-stage companies in Tennessee received over \$210 million in venture capital funding. This investment was spread across over 200 companies, resulting in an average of slightly over \$1 million per investment. These investments occurred at every stage of a business's life cycle, from very early "seed" stage investments to expansion-stage "growth" capital. While the volume of venture capital deals in Tennessee is most heavy for early-stage "seed" deals,

the majority of the funding for deals in Tennessee has been in companies with either a proven business model ("early") or in companies with both a proven business model and established customers looking to scale up the business ("growth"). Specifically, while over 50% of the deals in Tennessee are "seed" stage, over 90% of the investment dollars fund "early" and "growth" stage investments.

The Tennessee-based businesses that have

received venture capital investment are in a broad array of industries, ranging from healthcare and e-commerce to advanced manufacturing. The sectors receiving the most investment include Healthcare Services & IT, Life Sciences, Business to Business SaaS Programs and Data Analytics Solutions. Together, these four sectors account for 134 of the 201 (67%) of the deals, and \$180 million of the \$211 million of the investment that occurred in the state in 2012.



STAGE OF INVESTMENT	INVESTMENT AMOUNT	NO. of DEALS	AVERAGE INVESTMENT SIZE
SEED	\$ 19,928,405	104	\$ 191,619
EARLY	\$ 81,735,973	69	\$1,184,579
GROWTH	\$109,259,422	24	\$4,552,476

*Sources: LaunchTN, Price Waterhouse Cooper, Nashville Capital Network. Represents VC Investment up to \$15 million in size.

\$210,923,799 INVESTED
\$1,070,679 AVERAGE SIZE
197 # INVESTMENTS

The investors participating in Tennessee deals hail from across the country. For instance, Kentucky-based Chrysalis Ventures and Illinois-based Adams Street teamed up with Tennessee-based investment firm Claritas to invest over \$4 million in data-security company Cybera. One of the country's premier healthcare investment firms, California-based NEA, made a \$6 million investment during 2012 in an anatomic pathology lab company, American Pathology Partners.

In fact, over the past year, Tennessee's high growth early-stage companies received investment from over 15 out-of-state venture capital firms. Some of the largest deals of the year include primarily out-of-state investor-led deals in clinical communications company PerfectServe, for approximately \$11 million, and digital advertising company Edo, for \$15 million. Key deals also included a \$7 million investment in sleep disorder equipment developer Sleep Nation, and a \$7.5 million investment in claim resolution company Medical Reimbursements of America. Despite several larger deals such as these,

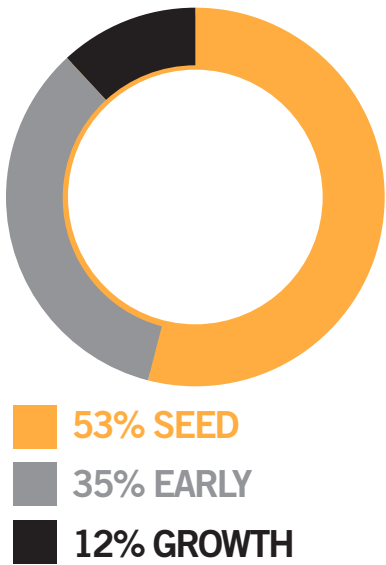
there were over 30 deals that were less than \$15,000 per investment. Facilitating these smaller deals were three of the state's business accelerator programs (Jumpstart Foundry in Nashville, Seed Hatchery in Memphis and Gig Tank in Chattanooga), all of which have partnerships with local venture capital firms that guarantee small amounts of financing for program participants.

A portion of these deals is being funded by two publicly funded venture capital programs: TNInvestco and the INCITE Co-Investment Fund. Created in 2009, TNInvestco is a state-funded venture capital program that provided capital to 10 venture capital firms located throughout the state. To date, these firms have invested over \$90 million in over 100 Tennessee-based companies. This investment has resulted in non-TNInvestco follow-on capital of over \$130 million, resulting in over \$220 million of cumulative investment in TNInvestco-related deals.

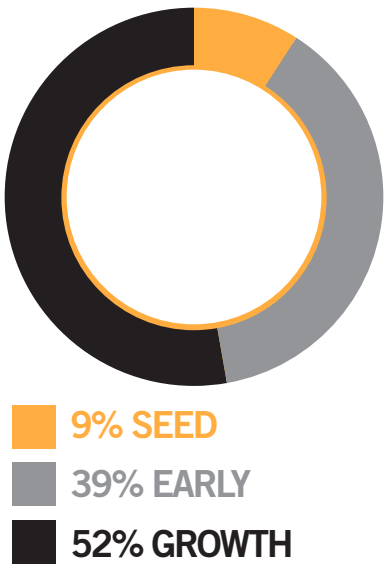
In 2012 alone, the TNInvestco firms invested a total of over \$35 million in 46 Tennessee-based companies. In addition, the INCITE Co-Investment Fund was established with \$29.7 million of federal funding that Tennessee received from the federal Small Business Jobs Act of 2010. The INCITE Fund is a co-investment fund in which private sector investors select and lead investments, and the co-investment fund matches a portion of the capital from the private-sector investors (the investors receive a 25% carry on INCITE Fund profits). In 2012, the INCITE Fund provided capital to 18 Tennessee-based companies.

Together, these companies received a total of \$26 million in capital, including \$7 million in INCITE Fund capital and \$19 million in private sector matching capital. Companies receiving INCITE funding were in many sectors including software, internet services, healthcare and consumer services. Details about the INCITE Fund, including how investors and companies can participate, can be found at www.launchtn.org/incite

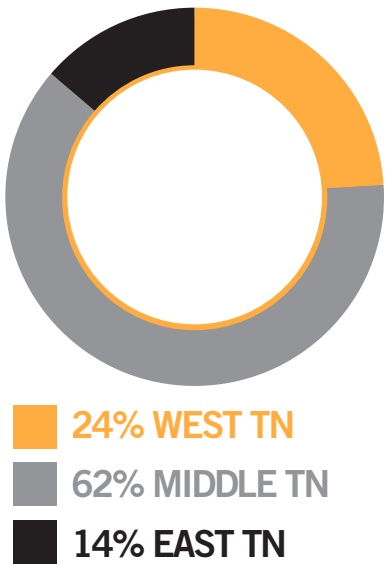
Investments by Stage of Growth: 2012 (by deal volume)



Investments by Stage of Growth: 2012 (by investment dollars)



% of investments by Geography



“IN 2012 ALONE, THE TNINVESTCO FIRMS INVESTED A TOTAL OF OVER \$35 MILLION IN 46 TENNESSEE-BASED COMPANIES.”

GROWING CONNECTIVITY

ONE SIGN OF A THRIVING ENTREPRENEURIAL ECOSYSTEM IS GROWING **CONNECTIVITY** BETWEEN THE STATE'S ENTREPRENEURS, INVENTORS AND INVESTORS.



Commissioner Bill Hagerty (left) on a Tennessee regional site visit

In Tennessee, one thing is for sure — connectivity between the state's investors and entrepreneurs is occurring more rapidly than ever before. Perhaps one of the best examples is **Global Entrepreneurship Week (GEW)**, an annual week-long celebration of entrepreneurship that was started in part by the Kauffman Foundation. Today, more than **115** countries, **24,000** organizations and **7 million** people participate in events during the week.

In 2012, various organizations in Tennessee held 96 events during GEW, making Tennessee the **No. 1 state** in the country for the number of events held during the week for the second year in a row. Over 60 partner organizations and 1,000 Tennesseans participated in these events. A few highlights of the week include:

TRI-CITIES:

On the final weekend of GEW, accelerator AccelNow held a Startup Weekend with over 30 aspiring entrepreneurs. During the **54**-hour event, developers, marketers and startup enthusiasts came together to share ideas, build products and launch startups.

KNOXVILLE:

On Monday and Tuesday of GEW, Tech 20/20, an organization supporting entrepreneurs and commercialization activities in Oak Ridge, held their annual Entrepreneurial Imperative event, where over **200** attendees came together to hear from innovators and investors from across the country.

CHATTANOOGA:

On Tuesday of GEW, the Chattanooga Area Chamber of Commerce hosted the Spirit of Innovation Awards to recognize Chattanooga companies who developed innovative products and services. This event also was used to announce the city's second annual Gig Tank business boot-camp, hosted by the accelerator CO.LAB.

On Thursday of GEW, CO.LAB hosted a pitch competition called **Will This Float?**, where 20 business ideas competed for a chance to win **\$250,000** from the organization 500 Startups.

COOKEVILLE:

On Thursday of GEW, the UC Success Now Regional Accelerator hosted a session entitled **"Entrepreneurship: Putting the Pieces Together."** Rick Harrison, small business owner and television celebrity on the TV show Pawn Stars, spoke via live webcast on the importance of small businesses, and Adam Shepard, an inspirational speaker and author, spoke on the entrepreneurial spirit.

NASHVILLE:

Nfocus Magazine sponsored a breakfast focused on empowering women as entrepreneurs and private sector leaders while the Nashville Area Hispanic Chamber of Commerce hosted two workshops focused on **"Access to Capital"** and **"The Seven Deadly Sins that Kill Small Businesses."** The Nashville Entrepreneur Center celebrated the groundbreaking of its new office space at the

historic Trolley Barn, and Life Science Tennessee held their annual meeting, which included a venture showcase with **\$50,000** in cash prizes.

WEST TN/JACKSON:

The Tennessee Small Business Center and the University of Tennessee at Martin teamed up to provide a two-hour seminar for future entrepreneurs. The Jackson Entrepreneur Center also hosted a coffee networking session for female entrepreneurs that included a panel of local female small business owners.

MEMPHIS:

Throughout GEW Week, LaunchYourCity, an entrepreneurial initiative in Memphis, hosted a series of events that included **"Core Conversations,"** an event where successful business owners shared their experiences with younger aspiring entrepreneurs. On Friday of GEW, the LaunchYourCity team coordinated **"The Amazing Race,"** an event where three preselected startups competed for **\$10,000** in cash and in-kind prizes.

In addition to Global Entrepreneurship Week, one of the largest entrepreneur and innovation-related events in the state during 2012 was the **GOVERNOR'S INNOVATION CONFERENCE**. Held in Nashville in May, the event brought together over **400** entrepreneurs, investors and inventors from around the state to discuss entrepreneurship and commercialization. Governor Bill Haslam keynoted the event.

Several nationally renowned investment firms such as **Mohr Davidow** and **New Enterprise Associates** participated in conference panel discussions on trends within the venture capital industry.

A number of startups also participated in the conference pitch competition. In all, 24 companies competed for cash prizes divided into four sectors:

1. **Life Sciences and Health Care**
2. **Technology and Electronics**
3. **Digital Media and Entertainment**
4. **Alternative Energy/Sustainability**

Numeta Sciences won the healthcare & life sciences track for its development of nutraceutical products to improve metabolic health risks. Populr.Me won the technology & electronics track for its multimedia self-publishing platform. Stall Talk won the digital media & entertainment track for its advertising platform using portable restroom blocks at large scale events. LED North America won the alternative energy & sustainability track for its business of developing advanced, low-cost LED lighting solutions.

In addition to these events, both traditional and digital news organizations across Tennessee rapidly expanded their coverage of innovation and entrepreneurship during 2012. For example, The Commercial Appeal, based in Memphis, and The Tennessean, based in Nashville, assigned reporters to specifically cover entrepreneurship.

*Sources:
Kauffman Foundation

GLOBAL ENTREPRENEURSHIP WEEK

96 EVENTS **60** PARTNERS
1,000+ PARTICIPANTS

#1 IN THE COUNTRY



Other newly-created news organizations have also sprung up to cover entrepreneurship, including Nibletz, which moved its headquarters to Memphis in 2012, and Southern Alpha, which launched in Nashville with backing from local investors in 2012.

Blogs covering the innovation space are actively followed in Tennessee, including Venture Nashville Connections, which primarily reports on investment-related information, and Teknovation.biz written by Tom Ballard, a former executive at Oak Ridge National Lab and the University of Tennessee who now works for the healthcare consulting firm Pershing Yoakley.

LaunchTN and Southern Alpha also produce daily clips on innovation activities going on in Tennessee, the Southeast and nationwide.

You can visit www.launchtn.org or www.southernalpha.com to sign up for these clips.

“CONNECTIVITY BETWEEN THE STATE'S INVESTORS AND ENTREPRENEURS IS OCCURRING MORE RAPIDLY THAN EVER BEFORE.”

115 COUNTRIES
24,000 ORGANIZATIONS
7,000,000 PEOPLE
PARTICIPATE IN EVENTS DURING THE WEEK.





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www.launchtn.org
230 4th Avenue North
Suite 601
Nashville, TN 37219
615-673-4419

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